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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,192	12/02/2003	Kwasi Addo Asare	RSW9-2003-0193US1 (7161-1)	2577
46320	7590	10/19/2006	EXAMINER NEWAY, SAMUEL G	
CAREY, RODRIGUEZ, GREENBERG & PAUL, LLP STEVEN M. GREENBERG 900 PENINSULA CORPORATE CIRCLE SUITE 3020 BOCA RATON, FL 33487			ART UNIT 2193	

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/726,192	Applicant(s) ASARE ET AL.	
	Examiner Samuel G. Neway	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 17 are pending and are considered below.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 8 – 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 8 is directed to a system including a hosting environment, a repository, and a classification processor, which can reasonably be considered as being software alone and as Applicant notes “the present invention can be realized in hardware, software, ...”. Software alone is functional descriptive material and therefore non-statutory.

Claims 9 – 10 fail to resolve the deficiencies of Claim 8, since the operating system, the application server, and the virtual machine, or the fact that the model may be an XML formatted document as defined in Claims 9 – 10 can also be reasonably be interpreted as software alone.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 4, 6 – 9, 11 – 14, 16 – 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lanning (US Patent 5,787,285).

Claim 1:

Lanning discloses a hosting environment abstraction method with the steps of:
enumerating each of a set of components in an application ("basic blocks ... include segments A, B, C,...", fig. 5, items 565-574);

identifying dependencies between each component in the set ("basic blocks are interconnected by flow control path", col. 5, lines 18-20, fig. 5, item 564);

organizing a generic representation of the set of components into a hierarchical structure based upon the identified dependencies (fig. 5);

producing a model encapsulating the hierarchical structure ("develop a flow control graph", fig. 4A, items 404, 406, also fig. 5);

and, storing the model in a repository for subsequent retrieval ("for each basic block ... compare the block's frequency ", fig. 4B, item 416. Item is compared so is inherently stored).

Claim 2:

Lanning discloses the method of claim 1, and he further discloses the steps of:
further identifying dependencies between target platform resources ("frequency of execution ...", fig. 4B, item 416, indicates how much CPU time is used (resource)) and the components in the set; and, recording the further identified dependencies in the model (fig. 7).

Claim 3:

Lanning discloses the method of claim 1, where the identifying step includes the step of inspecting each component in the set for data and method member references to other ones of the components in the set, the references indicating a dependency ("basic blocks are interconnected by flow control path", col. 5, lines 18-20, fig. 5, item 564).

Claim 4:

Lanning discloses the method of claim 2, where the further identifying step includes the step of inspecting each component in the set for data and method member references to the target platform resources ("for each basic block ... frequency of execution ...", fig. 4B, item 416, indicates how much CPU time is used (resource))

Claim 6:

Lanning discloses the method of claim 1, he further discloses the step of performing enumerating, identifying, organizing, producing and storing step subsequent to installing the application in a target platform ("profilers monitor the execution of a particular piece of software and gather information on the most likely paths of execution", col. 1, lines 45-47. The software must be installed before it is profiled).

Claim 7:

Lanning discloses the method of claim 1, he further discloses the step of retrieving the model from the repository prior to installing a new component for use in the application ("for each basic block ... compare the block's frequency ", fig. 4B, item 416. Item is compared so is inherently stored and retrieved. Whether the model is retrieved prior to installing a new component does not have patentable weight because

the installation of a new component does not affect in any way the invention as claimed).

Claim 8:

Lanning discloses a hosting environment abstraction system (fig. 2) including:
a hosting environment configured to support an application including a plurality of interdependent components and resources which support at least one of the interdependent components ("system for optimizing a code segment for", col.4, lines 19-21);

a repository configured to store a dependency model of the application (fig. 2, item 221);

and, a classification processor coupled to the hosting environment and the repository ("target computer system", fig. 2, item 216).

Claim 9:

Lanning disclose the system of claim 8, where the hosting environment includes one of an operating system, an application server and a virtual machine ("target computer system", fig. 2, item 216).

Claims 11 – 14, 16 – 17:

Claims 11 – 14, and 16 – 17 are directed to a machine readable storage storing a computer program for the methods of Claims 1 – 4, and 6 – 7. Claims 11 – 14, and 16 – 17 are rejected as Claims 1 – 4, and 6 – 7.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lanning (US Patent 5,787,285) in view of Ballantyne et al. (US PGPub 2001/0044811).

Claim 5:

Lanning discloses the method of claim 1, but he does not disclose the step of writing the hierarchical structure to a markup language document where tags in the markup language document demarcate individual ones of the components and the identified dependencies.

Ballantyne discloses a method generating a flow diagram (paragraph 49) similar to Lanning's flow control graph where the output data is in XML (Extensible Markup Language) format.

It would have been obvious to include the XML features as claimed in the instant claim in Lanning's method because "XML specifies a format that is easily adapted for ... direct transfer as an object between different applications" (Ballantyne, paragraph 4).

Claims 10, 15:

Claims 10 and 15 are rejected for the same reason as Claim 5.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Vogel (US Patent 5,790,858) discloses a method identifying code portions such as basic blocks and creating a control flow graph.

Diec et al. (US Patent 6,083,281) discloses an object-tracing tool providing a view of the control flow.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel G. Neway whose telephone number is 571-270-1058. The examiner can normally be reached on Mon - Thur 8:00AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on 571-272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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